MEMOIR OF A CHART

OF THE

BAY OF BENGAL,

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IT muſt appear very extraordinary, when it is conſidered how long the *Europeans* have had an Intercourſe with *Bengal*, that there is not hitherto a *particular* Chart of the *Bay* of *Bengal* publiſhed in any language.

The Honourable Thomas Howe deceaſed, in the year 1763, after the action with a French Frigate in which he ſo gallantly defended his Ship, went to the Coaſt of *Orixa*; in his paſſage from thence to *Bengal* he had an opportunity of correcting the Chart of this Coaſt in the *Neptune Oriental*: and having reduced to a *general Scale* all the particular

Charts

Charts in his poffeffion of the Coafts, &c. in the *Bay* of *Bengal*, he connected them together in the beft manner he could.

Soon after my return to England, in 1765, Mr. Howe gave me a Copy of his Chart; and encouraged me to revife and improve it from what materials I had collected: accordingly I fet about this work and reduced the Coaft of *Orixa* to a fcale of 3 Inches to 1°.—the *Original*, at firft only intended as a correction of the Neptune Oriental, being fomewhat more.

Plaifted's Survey of the *Coaft of Chittagong*, ferved, both in Mr. Howe's Chart and mine, for the defcription of that Coaft; but I added, from other authorities, fome Banks remote from the Land.

The Coaft of *Ava* from *Negrais* to *Chedube* I laid down from various materials; but here I found fo great a difagreement in the Latitudes, even where I was affured *all proper allowances* had been made, that I defifted from my intention of having the Chart engraven: however Capt. William Smith and I examined feveral Journals in the India-Houfe, and laid down many *foundings* in the tracks acrofs the Bay.

Copies of this Chart were given to feveral perfons, amongft others to Capt. Mears and to Capt. Court, who, on their return laft Year, teftified the higheft approbation of it, particularly concerning the *foundings* about *Falfe Point* and *Point Palmiras*.

On mentioning their fentiments to the Honourable Mr. Howe, in his laft illnefs, and fhewing him the copy which the Eaft-India Company had permitted me to take of the *late furvey* of the *Coaft of Bengal*, he very ftrongly recommended to me to publifh this Chart, from an opinion that it would be very

very uſeful to the Company's Ships, and alledged that my objection concerning the Latitudes was not of weight, as a proper Caution might be given on that head.

Not long ſince, in converſation with Mr. Purling, the Chairman of the Court of Directors, ſaying that I would be at the trouble of engraving this Chart, if the Company would be at the expence, I was induced, from the ſentiments he then expreſſed, to ſend him ſoon after a paper of propoſals for his peruſal, this he communicated to the Court of Directors, who inſtructed their Secretary to write me a letter encouraging me to execute this work.

When I drew up the propoſals I only thought of adding the *new ſurvey* to my Chart, and publiſhing it in that ſtate; and had not indeed ſeriouſly weighed the matter, as it was only a private converſation; but when I received the Company's letter, it became a ſubject of publick attention, and it occurred to me that although this Chart was the *beſt* I knew of the *Bay of Bengal*, it was capable of amendment; and therefore that it was inconſiſtent with my own credit, and an unbecoming return to the ready encouragement given by the Company, to publiſh it in its then form; for although it was well enough as a MS Chart, yet a Chart preſented to the *Publick* ought to be as compleat as materials will admit.

On mentioning this to Mr. Purling, and obſerving that it would be neceſſary for me to *new-draw* the whole, he ſaid what I alledged was juſt, and that he was convinced, as he at firſt told me, that it would coſt much more than I reckoned; but that the Gentlemen of the Direction approved of it greatly, as they thought it would be very uſeful, and therefore begged me to go on with it and be aſſured that the Company would defray the expence.

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The very handſome manner in which Mr. Purling behaved on the occaſion has a claim, not only to my acknowledgement, but to that of the Publick, as to him, they are, in good meaſure, indebted for this Chart.

It was at firſt propoſed to have engraved the Chart on two plates, comprehending the *Bay* with the *Coaſts* of *Ava*, *Orixa*, &c. from 16°.—N, but on more mature conſideration I have been induced to make *one* plate from 19°.—N, comprehending *both Coaſts*: the Coaſts to the Southward of this Latitude are the leaſt material, but will take moſt time and trouble to lay down, which would retard the publication; the preſent limit comprehends the extremity of the *Bank of Soundings*; the former plan, of carrying the Chart down to 16°.—N, would have rendered it of an inconvenient ſize, when the two plates were united, and have occaſioned a great *blank* by the *open ſea* between the *Coaſts of Ava and India*: which Coaſts may, with more propriety, be engraven by themſelves, ſhould the materials for deſcribing them be found ſufficiently compleat for forming Charts worthy the attention of the Publick.

I have here given the *Hiſtory of this Chart* from its firſt formation; and ſhall now particularly explain the various materials from which it was laid down in the ſtate it now appears.

The poſition of *Calcutta*, in 22°. 34′. 43″N and in 88°. 33′. 15″E Long. fr. Greenwich, is from the obſervations of the Honourable Mr. Howe; the Latitude taken by an aſtronomical Quadrant made by Mr. Bird,

$$1764,\ \text{March}\ \begin{Bmatrix} 4\text{th}\ -\ -\ -\ 22°.\ 34'.\ 40''. \\ 6\text{th}\ -\ -\ -\ 22.\ 34.\ 46. \end{Bmatrix} \text{N.}$$

The Longitude deduced from an Emerſion of Jupiter's 1ſt Satellite on the 6th March 1764.

The

The Situation of *Islamabad*, in 22°. 20′ N Latitude, 91°. 45 E Long. fr. Greenwich, was deduced by the *Astronomer Royal* from the Observation made there of the Transit of Venus in 1761.

The difference of Longitude between *Calcutta* and *Islamabad* by these *observations* 3°. 11′. 45″. is scarcely a mile different from the *late survey*, so that it may reasonably be presumed these places are exactly determined.—At the same time I do not mean to insinuate that any two astronomical Observations can be confided in for the determination of so small a distance as a mile.

These are the *only* observations I have of the Longitudes taken *ashore*.

Ganjam Flagstaff is in 19°. 25′ N Lat. 85°. 17′ E Long. by Observations of ☉ and ☾ taken there in September 1770 by Mr. Mears Chief Mate of the Egmont; Mr. Howe places *Ganjam* in 19°. 22′. 30″ N which is 2′. 30″ more to the southward. And, by the distance from the *False Point*, in 85°. 6′ E Longitude, which is only 11′ different from the Longitude observed by Mr. Mears; I have laid it down by Mr. Howe's Chart. Having copied the Coast, from *Ganjam* to the *Flat sandy Pt.* near the *Black Pagoda*, from that Chart.

From *this Point* to the *False Point* I have made a deviation from the *Chart*, to insert a Plan of *Podgon* or *Codgoné*, communicated by Mr. Herbert, this Plan was made by W. Helman 1742. The *Island* at the *Wn. Extremity of this Bay* is called, in the plan, the *False Point*, but, as the Land trends away to the Eastward, this would be entirely incompatible with the *Survey* from *Pt. Palmiras* to *False Point:* which *Survey* also describes *False Bay* quite differently from *Helman*'s plan of *Codgoné*, of which place I have some other sketches and memorandums similar to the Plan. The *double Bank* in Mr. Howe's

Mr. Howe's Chart pointed out to me the poſition of *Codgoné*; the *W^n. Sand* being (as I ſuppoſe) off *Helman's Falſe P^t.* (which I ſhall call *Codgoné P^t.*) the *E^n. Sand* off the *Falſe P^t.* of the *Survey*; Mr. Howe's Latitude of *Falſe P^t.* being ſomewhat more *ſoutherly* than the Land is deſcribed in the *Survey*, I have continued the *Land* to Mr. Howe's Latitude; a memorandum in Helman's plan confirms the alteration I have made by inſerting *Codgoné* in this place, for he ſays, ſpeaking of ſome *Trees* laid down in his plan*, " Theſe bearing N. you " have *ſoft* ground," which bearing is *juſt clear* of Mr. Howe's *W^n. Sand* and correſponds to the *mud gap* he deſcribes, which it is very natural to expect as the *River* of *Cuttack* falls into this *bay*.

The inſertion of *Codgoné bay* carries the Land from *Falſe Point* more *Weſterly* than in Mr. Howe's Chart, and, conſequently, the Land from the *Black Pagoda* more *Northerly* than Mr. Howe deſcribes it; this is very conſonant to the *Neptune Oriental*.

The *Survey* ſent to the Company from Bengal bears the name of John Ritchie, but it is ſaid great part of it was made by Plaiſted: It is not accompanied with any explanation; it has been reduced, and this reduction implicitly followed from *Falſe Point* to *Chittagong*; but the *Coaſt* of *Chittagong* appearing to be taken, not from Plaiſted's *Survey*, but from his *firſt* ſketch, I have preferred *Plaiſted's* Survey in 1761, to *this Part* of the *New Chart*: however I have added ſome dangers omitted by *Plaiſted*; it is to me very obvious that the dangers on this Coaſt are very far from being yet exactly deſcribed.

I have added the River to Calcutta, and traced the other Channels up from their Mouths.—My intention in tracing the rivers was to point out the direction of the *Stream*, that Ships may avoid it, or take the advantage of it, according to circumſtances.

* Vid. 1 in Chart.

As

I find the *Tails* of the *Sands*, at the Mouth of *Bengal River* in the SURVEY, by no means conformable to the Journals of Ships; ſhould I hereafter publiſh the chart of the Coaſt of *India*, I may perhaps make it comprehend the *Sands* laid down from the Journals, which would be uſeful as a caution.

The *Eaſt ſide* of the Bay, to the Southward of *Red-Crab Iſland*, having been lately *ſurveyed*, I thought it would be improper to inſert this *Coaſt* in the Plate, till the *Survey* is received; I ſhall therefore make a particular Plate of it from the bearings and obſervations I have met with, and in this Plate the Soundings from the *Coaſt* of *Arrackan* to the *Swatch* or *Gut* of *no ground* will be inſerted: it will be on the ſame ſcale and is intended to be paſted to the chart now publiſhed.

Since this Memoir was printed I have received from the India-Houſe a *Chart* of the *Bay* and *River* of *Bengal*, by Philip Parſons, 1743-4: in this Chart *Codgoné Bay* is, in figure, little different from Helman's plan; but N in that, is E in Helman's: Parſons ſays the river (marked 3 in the Chart) "vents "near the *Black Pagoda*," this it would do according to the direction Helman gives it; but Parſons's Chart makes the Mouth of it a *little* to the *Southward* of *Codgoné Point*, or, what he calls, the *Falſe Point*; ſeveral other notes in Parſons's Chart are equally contradictory to the *bearings* in his *chart*, though theſe notes are very conſonant to Helman's bearings; Parſons ſays, "theſe Trees bearing N. [vide 1 in chart] you'll be "in *ſoft mud*," which *bearing* in his chart leads over the *gravelly bank*;—again he ſays, "this Tree [vide 2 in chart] bearing N. "in 7 fath. *mud*, a W N W courſe will carry you to the "River's Mouth;" whereas, by his chart, this Tree bearing N is in *a line over the Land into the River*.—I therefore conclude Parſons has inſerted the Plan of *Codgoné Bay* erroneouſly, by aſ-

ſuming

ſuming the *known bearings* of *Point Palmiras* and the *Falſe Point*, being miſled by *Codgoné Point* being named the *Falſe Point*.

My intention was to have accompanied this Chart with ſome Nautical Inſtructions and Obſervations; but I am not yet maſter enough of the Subject to attempt any thing of this nature; and find it has already employed much more of my time and attention than I expected or could conveniently beſtow: and although all *plain matters of fact* are *uſeful*, *ill-grounded* deductions may be *very prejudicial*.

Soho-Square,
16 Sept. 1772.

ALEXANDER DALRYMPLE.

FORTEGNELSE

PAA

DE KAARTER OG LANDTONINGER, SOM HÖRE TIL DENNE BERETNING.

(*) De Kaarter fom her ere betegnede med * være for ftore til at indbindes, og fölge derfor löfe med Værket.

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